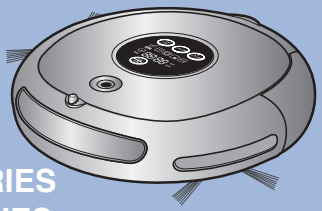
SAMSUNG

Robotic vacuum cleaner

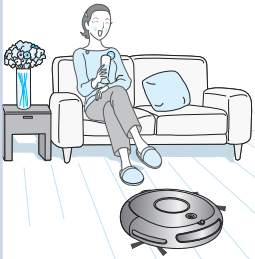
Operation manual of the product



Precautions for safety are the contents to secure the safety of user and to prevent damage of property etc. Please read carefully to have proper use of the product.

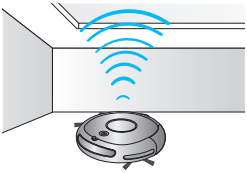
※ This product has been made to be used in Korea, and the quality will not be guaranteed in overseas countries.
(FOR KOREA UNIT STANDARD ONLY)

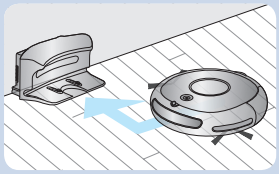
VC-RA52V
VC-RA50V* SERIES
VC-RL52V* SERIES
VC-RL50V* SERIES



What is the ceiling image recognition (Visionary Mapping TM) method?

As the product moves with its own judgment on the place to clean after recognizing the image of ceiling with the camera located at the upper section, every part of the room can be cleaned.



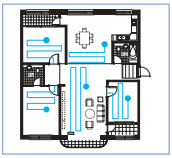


Realizing fine and uniform cleaning for every part of the room

As the cleaning is conducted by following the lattice pattern (⇄) with the ceiling image recognition method, cleaning can be performed for every part of the room.

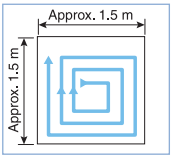
Diverse cleaning mode

Various cleaning modes are provided in accordance with the cleaning circumstances.



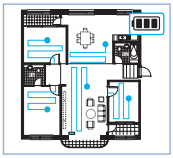
Automatic cleaning mode

Perform uniform and convenient cleaning for every room.



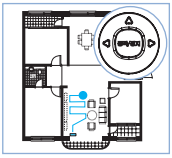
Partial cleaning mode

Perform the cleaning of partial area or when being scattered of small fragments of cookies etc.



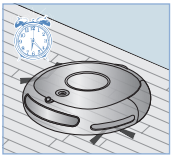
Repeated cleaning mode

Perform repeated cleaning until battery is exhausted.



Manual cleaning mode

Perform the cleaning by directly moving the cleaner with remote controller.

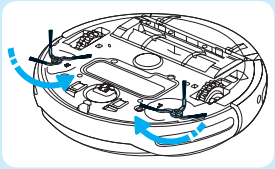


Reserved cleaning mode

Reserve the cleaning at desired time when going out

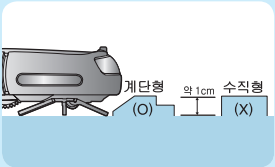
Automatic charging

When remaining amount of battery is not sufficient, the charger induces the robotic vacuum cleaner, therefore, accurate automatic charging can be accomplished.



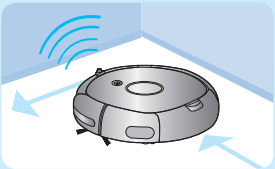
Dual side rotating brush

Dust is removed by the rotation of dual side brushes.



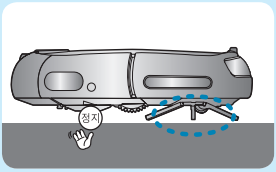
Threshold traveling

Approx. 1 cm of threshold can be traveled with special driving system, therefore, all the rooms can evenly be cleaned. However, for the sake of safety, the threshold of more than 1 cm can not be crossed.



Soft bumping

Dust of every corner can be neatly cleaned by approaching to the corner as much as possible through the minimizing of colliding impact as the velocity is reduced by 7 obstacle sensors when encountering with obstacle and through the relieving of the colliding impact by 2 bumper sensors during the cleaning. (The obstacle sensor displays higher sensitivity against bright obstacle.)



Safety device

If lifting the robotic vacuum cleaner while it is in operation, the motions of driving wheel, power brush, suction motor, and side rotating brush will be stopped due to the detection of the sensor.

Remote controller

The robotic vacuum cleaner can easily be operated with the remote controller.

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Always observe followings for safety

These are the contents to secure the safety of user and to prevent damage of property.
Please have safe operation by reading carefully of the following items.

220V This product is used 220V as the rated voltage.

Warning If warning items are not being observed, death or serious wound can be occurred to the user.

Caution If caution items are not being observed, wound or property damage can be occurred to the user.

Reference Corresponding terminology will be explained to improve the understanding for the product operation.

This is the disassembly prohibited indication.

용어* Contents with which more efficient use of the product can be realized will be explained.

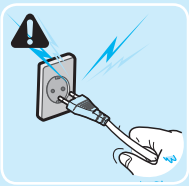
p Refer to the corresponding page.

Items related with the power supply

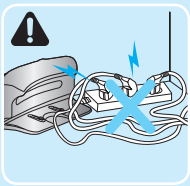
WARNING

Do not impair the power supply cord by excessively bending it or pressing it down with heavy object.
▶ There is the danger of electric shock or fire.

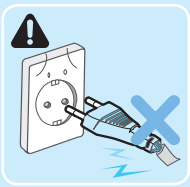
If dust, water etc. are adhered to the pin and contact section of the power supply plug, thoroughly clean them.
▶ There is the danger of abnormal operation and electric shock.



Do not pull the power supply cord section or touch the power supply plug with wet hand.
▶ There is the danger of electric shock or fire.



Do not use the power source other than 220V or do not connect several electric products simultaneously to one outlet. (Do not expose the cord line on the floor.)
▶ There is the danger of electric shock or fire.



Do not use damaged power supply plug, power supply cord, or loosened outlet.
▶ There is the danger of electric shock or fire.

Always observe followings for safety

These are the contents to secure the safety of user and to prevent damage of property.
Please have safe operation by reading carefully of the following items.

Before the use

CAUTION WARNING

Confirm whether dust bin is assembled before operating the robotic vacuum cleaner.

- If dust bin is not assembled, the robotic vacuum cleaner will not be operated.

Never operate the cleaner at the location where inflammable is placed.

- At the location where candle or light stand for desk are placed on the floor.
- At the location without people where light is existed or fireplace is lighted.
- At the location where inflammables such as gasoline, distilled alcohol, thinner, and ashtray with lighted cigarette etc. are placed.

Never use the robotic vacuum cleaner at the following locations as it is a household appliance.

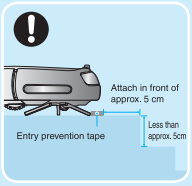
- Critical damage (malfunction, breakage) can be occurred to the product if it is used at the attic, basement, warehouse, industrial building, separate space away from indoors, locations where water is always existed such as bathroom, laundry room etc., and narrow and elevated locations such as table, shelves etc.

Attach entry prevention tape to railing or stairway entrance etc. where falling danger is existed.

- If dust is accumulated at the falling prevention sensor window, falling may be happened as the falling danger zone can not be identified by the robotic vacuum cleaner.
- If falling, injury or damage to the product can be happened.

In order to have cleaning of all of the rooms, open the doors of rooms before the cleaning.

- If the door of room is closed, the robotic vacuum cleaner can not enter the room.
- However, always close the doors of entrance, veranda, and rest room etc., through which the robotic vacuum cleaner can be dropped.



Always attach entry prevention tape to the zone into which the robotic vacuum cleaner can not be entered.

- Attach to the zone with the difference of height of less than 5 cm from the floor.
  Example) Entrances of veranda, rest room, low staircase, and porch etc.
- Attach to the fire zone (fireplace, heater, and candle etc,) or danger zone with moisture.
- As entering may be happened in accordance with the condition of floor surface, close the doors of rest room, veranda, and porch etc., during the cleaning.

Be careful not to make the robotic vacuum cleaner to be passing through or sucking in water, oil, and liquid of excrement of pet etc.

- Fatal damage can be inflicted on the product.
- Other place can be contaminated through the liquid adhered to the wheel.

CAUTION

In the case of the carpet with long tassel at the end, fold the end section to the inside.

- Fatal damage can be inflicted on carpet and robotic vacuum cleaner by being wound to driving wheel and power brush.

Remove in advance small or breakable object at the location of cleaning.

- Always remove these prior to the cleaning.
- By all means, remove those products of breakable ceramic ware or glass, and light flowerpot etc.
- The robotic vacuum cleaner does not identify coin, ring, or expensive jewelry etc.

Put away those objects scattered on the floor.

- The robotic vacuum cleaner is supposed to detect obstacles separated with the distance of approx. 5 cm.
- Thin towel, pad, power supply cord, table cloth, and belt etc., in front of the bathroom, sink stand, entrance door, and multipurpose room etc. can be tangled with driving wheel or power brush, or can be the cause of dropping objects on the table or dinner table.

Before the cleaning or after establishing the reserved cleaning function, let all the persons in the house to be careful about these by informing them.

- Children can be caught and fallen by mistake while they are running.

Never let children standing or sitting on the product while it is in operation.

- Through the falling by mistake, injury can be inflicted or fatal damage can be occurred to the product.

If child or pet is left alone, turn off the emergency switch of the robotic vacuum cleaner.

- The robotic vacuum cleaner can be the object of curiosity of child or pet.
- Injury can be inflicted if hand, feet, end of clothes, and hair etc. are caught in the driving wheel, side rotating brush, and power brush during the cleaning.
- If the robotic vacuum cleaner is interrupted while being followed along the path, the particular section may not be cleaned as it is being recognized as obstacle.
- In the case when emergency switch is turned off, all functions and power supply will be intercepted.

Always observe followings for safety

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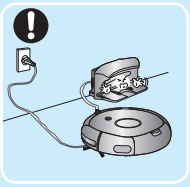
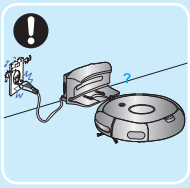
Before the use

CAUTION WARNING



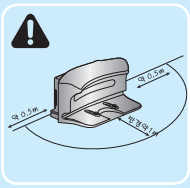
When installing the charger, do not expose the power supply cord on the floor.

- During the automatic electric charging or the passing in front of the charger, the robotic vacuum cleaner can be moved while drawing the power supply cord.

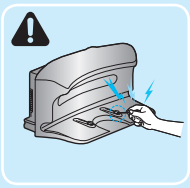


Always insert the power supply plug of the charger.

- If power is not supplied, automatic electric charging can not be performed.

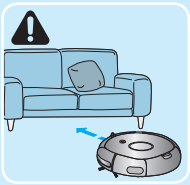


Remove the obstacles located in the vicinity of approx. 1m in front of and approx. 0.5m at left and right side of the charger.

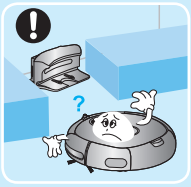


Do not make short the terminal of charger with metals such as chopsticks, driver etc.

- Fatal damage can be inflicted on the charger.

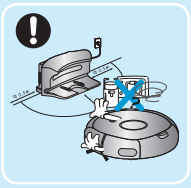


For the space with the height less than that of the robotic vacuum cleaner (low sofa, underneath of low bed etc.), entry may attempted or jamming can be occurred, therefore, attach the entry prevention tape.



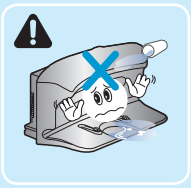
Install the charger at the location where it can be discovered easily.

- If installing it at recessed area, automatic electric charging will be difficult due to the excessive unnecessary motions.



If an object is placed in front of the charger, automatic electric charging can not be performed by the robotic vacuum cleaner.

- Take away the object.



Be careful not to have the inflow of liquids such as water, juice etc. on the charger.

- There will be the danger of electric shock or fire.

Do not use the charger for another application.

- There will be the danger of fire or fatal damage to the charger.

During the use

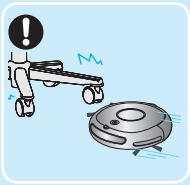
CAUTION WARNING REFERENCE

The robotic vacuum cleaner shall not be used on thick carpet.

- This can be the cause of failure of the robotic vacuum cleaner.
- The carpet may be damaged by this.

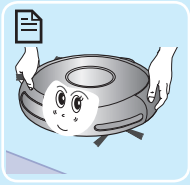
Do not use the robotic vacuum cleaner on the table or on elevated place.

- If it is fallen, there will be the danger of damage.



During the movements of the robotic vacuum cleaner, it can be collided with leg of chair, leg of desk, table chair, or thin and long furniture etc.

- For the sake of fast and tidy cleaning, put the table chair etc. on the table.



During the cleaning of the robotic vacuum cleaner, its traveling can be interrupted by being caught to the threshold of entrance door and of veranda etc.

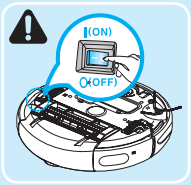
- If the driving wheel of the robotic vacuum cleaner is not rotated for more than 5 minutes, all the functions will be suspended and the movement will be stopped.
- In order to have the movement again, after turning off the emergency switch and moving the robotic vacuum cleaner to the movable location by lifting it, turn on the power supply, and then, perform the cleaning.

Do not put objects on the robotic vacuum cleaner.

- Malfunction can be generated.

If sucking in wide paper or vinyl bag during the cleaning, remove them immediately.

- If using the appliance for long time with the blocked state of the inlet, fatal damage can be inflicted on the product.



If abnormal noise, odor, or smoke is generated from the robotic vacuum cleaner, turn off the emergency switch immediately and call the customer care center.

Perfect cleaning can not be realized for the recessed corner or the space between sofa and wall etc. which can not be accessed by the robotic vacuum cleaner.

- Clean them separately from time to time.

During the cleaning by the robotic vacuum cleaner, the phenomenon of having a lump of dust remained on the floor may be happened due to the failure of inhaling it.

- Sweep it with another cleaning device.

Always observe followings for safety

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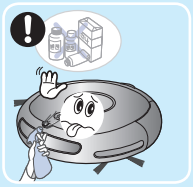
Please have safe operation by reading carefully of the following items.

Handling after the use

CAUTION WARNING



During the handling, do not directly spray water or polish the outside with volatile substances such as benzene, thinner, and alcohol etc.

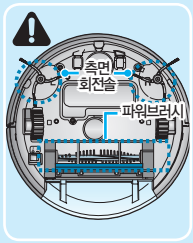
▶ Fatal damage can be inflicted on the product.

Do not squeeze with force or strongly press the bumper

▶ If bumper sensor becomes abnormal, collision with the surface of wall or fixture and so forth can be happened.

Regularly wipe off foreign material accumulated on the obstacle sensor and falling prevention sensor.

▶ The sensors may have malfunction due to the covering with foreign material.



When removing foreign material, always turn off the emergency switch in the first place, and then, use the brush for cleaning.

▶ If suddenly activated, injury or fatal damage to the product can be brought.

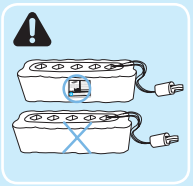
Never disassemble or modify the robotic vacuum cleaner except qualified repair technician.

▶ Fatal damage to the product can be happened.

In the case of damaging power supply cord, exchange it through the qualified repair technician of customer care center.

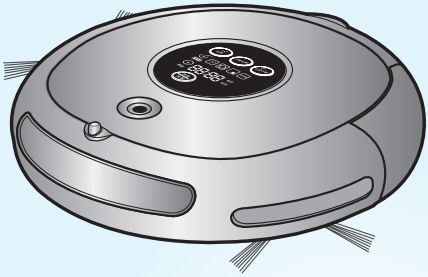
▶ There is the danger of electric shock or fire.

Do not handle the charger before separating the power supply plug.



When exchanging battery, call up the customer care center of Samsung Electronics.

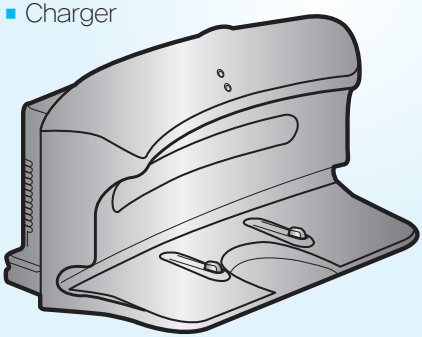
▶ If using battery which is not a legitimate product, it will be the cause of failure.

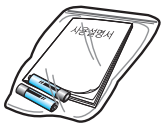
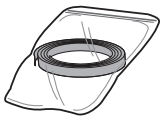
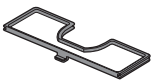


■ Main frame

■ Remote controller

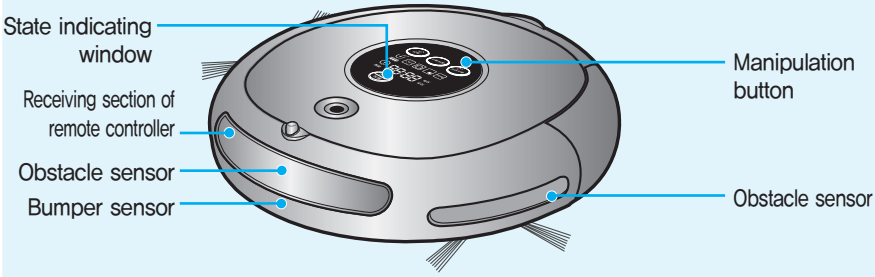
■ Charger



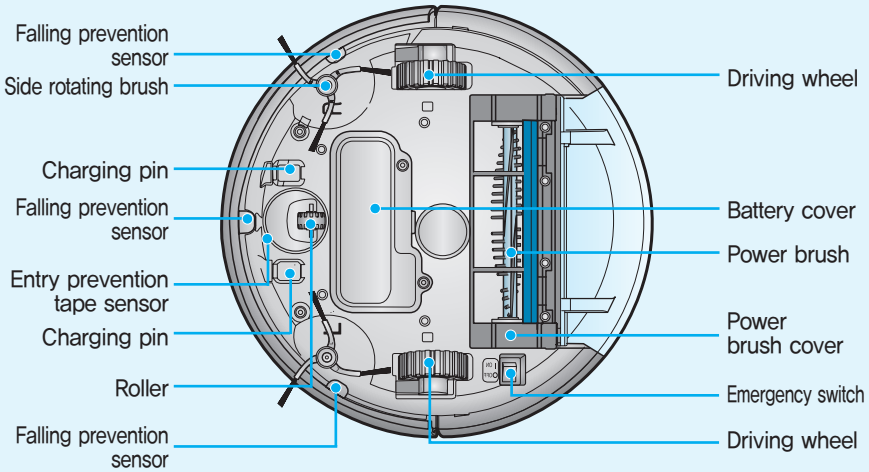
 (AAA type dry cell)		
Operating instruction/dry cell	Simple instruction	Entry prevention tape (1 set)
		
Brush for cleaning	Remote controller stand	Spare HEPA filter

Remember the names of each section.

■ Main frame

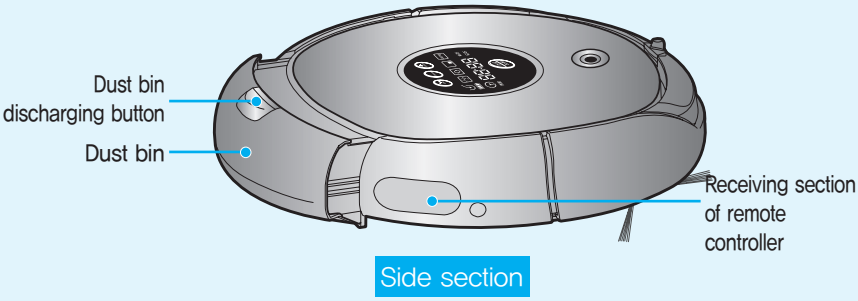


Front side



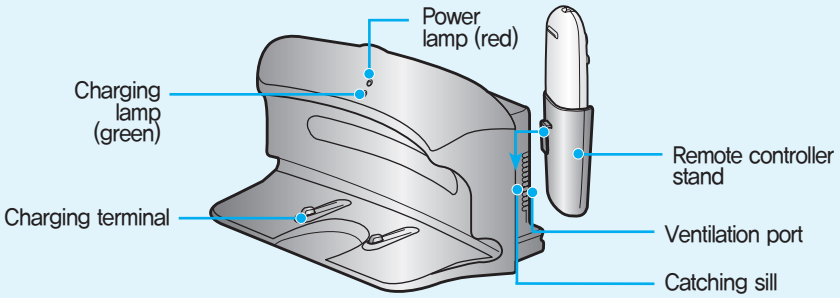
Bottom side

■ Main frame

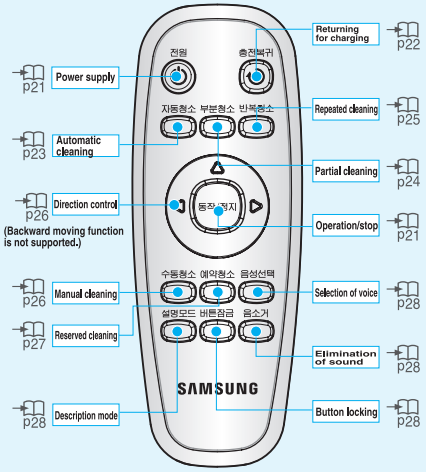


Side section

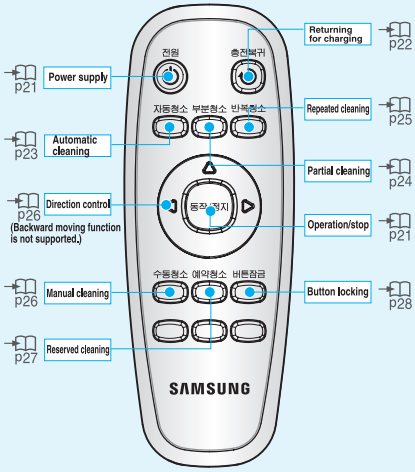
■ Charger



■ Remote controller



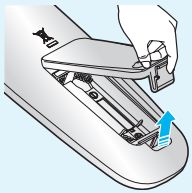
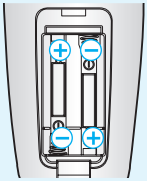
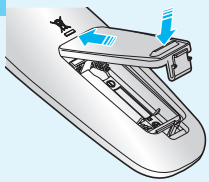
VC-RA52V
VC-RL52V* SERIES



VC-RA50V* SERIES
VC-RL50V* SERIES

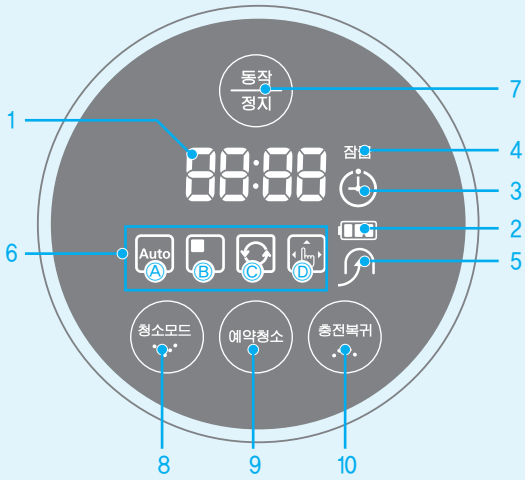
The method to put in dry cell

When purchasing the product, the dry cell is not existed at the remote controller inside. Assemble the dry cell (AAA type) and use the product.

1	2	3
		
Press the cover of rear side of remote controller and pull up it to upward	Assemble the dry cell as shown the picture in the remote controller. (If the assembly of ⊕ and ⊖ is erroneously performed, the remote controller will not be activated.)	After matching the cover of remote controller to the groove, close it until the "click" sound is generated.

※ Dimension: Dry cell of AAA size

■ State indicating window



Indicating section

1. Numeral indicating section
- Expressing reserved time indication, progress status, and checking guide with numeral, English letter, and graphic etc.

2. Battery
- Under charging: The progressing state of charging is indicated with 3 stages and it will be increased by one column at each stage.
- Under using: Remaining amount of battery is reduced by one column at each stage from the full state. (When being discharged completely, "LO" is indicated while one column is flickering.)

3. Reserved cleaning
- Reserved cleaning icon is turned on when setting up the reserved cleaning.

4. Button locking
- When the **button locking** button of remote controller is pressed, the button of main frame will be locked.

5. Returning to charging
- When the robotic vacuum cleaner is returned to the charger for charging, the icon will be turned on.

6. Cleaning mode indicating section
- Whenever pressing the cleaning mode button, the cleaning mode will be appeared in sequence.
  - ⓐ Automatic cleaning mode: The icon will be turned on during the automatic cleaning.
  - ⓑ Partial cleaning mode: The icon will be turned on during the partial cleaning.
  - ⓒ Repeated cleaning mode: The icon will be turned on during the repeated cleaning.
  - ⓓ Manual cleaning mode: The icon will be turned on during the manual cleaning.

Button section

7. Activation/stop
- Cleaning will be started or canceled.

8. Cleaning mode
- Start the cleaning by pressing the 동작/정지 button after selecting the cleaning mode.

9. Reserved cleaning
- Use this when selecting the reserved cleaning. (Establishment can be realized up to the maximum of 23 hours.)

10. Returning to charging
- The cleaner will be returned for charging as the icon of returning to charging is turned on.

Confirm at the time of installation.

Perform the installation in accordance with the following sequence.

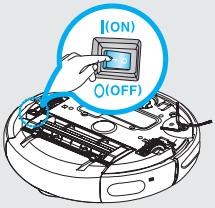
■ Installation sequence

1 **Emergency switch ON/OFF**
In order to use the robot vacuum cleaner, the emergency switch located underneath of the main frame shall be turned on. p16

2 **Installing the charger**
In order to have charging, install the charger in the first place. When purchasing the product, the battery is in the discharged state, therefore, use the charger after completely charging the battery. p 17

3 **Charging**
In order to use robot vacuum cleaner, the battery shall be charged in advance. p18

4 **Installing the entry prevention tape**
Always attach entry prevention tape to no entry area of robot vacuum cleaner. p 20



■ Emergency switch ON/OFF

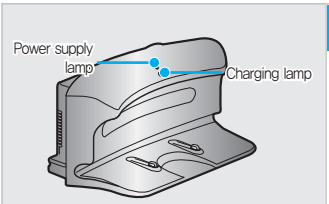
If robotic vacuum cleaner is to be activated, emergency switch shall be turned on. If the emergency switch is turned off, all the settings will be initialized.

1 **Turn on emergency switch by turning the main frame upside down.**

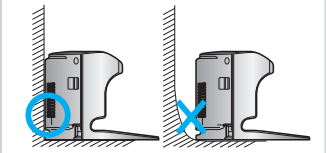
▶ If the icon is not turned on, the battery is in the state of no storage, therefore, turn on emergency switch, and perform charging to the charger.

Caution

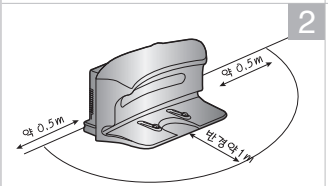
When emergency switch is turned off, charging will not taken place even if robotic vacuum cleaner is being attached to the charger.



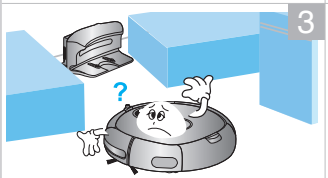
■ Installation of charger



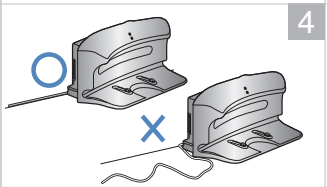
1 Install the charger at the location where the floor and wall are even.



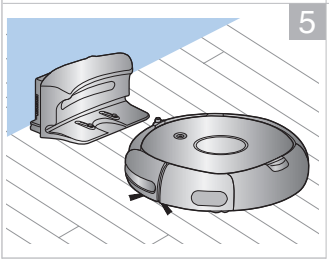
2 Install the charger at the location where there are no obstacles around approx. 1m in front of and 0.5 m to the left and right side of the charger.



3 Install the charger at the location which can easily detected by the robot vacuum cleaner.



4 Evenly arrange the power supply cord along the wall surface.

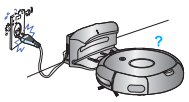


5 In the case when the floor material is comprised of lumber material, it is desirable to make the charger facing in the grain direction of wood.

Reference

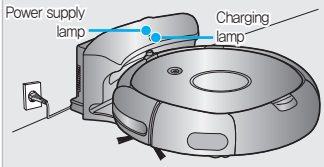
For charger, always maintain the inserted state of its power supply plug.

- If power is not supplied to the charger, automatic charging can not be accomplished because robotic vacuum cleaner can not detect the charger.



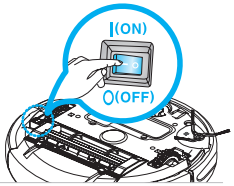
- In the case when robotic vacuum cleaner is being separated from the charger, natural discharging will be taken place.

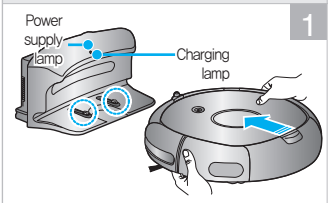
Remember the installation method. Observe the following sequence before inserting the power supply plug of charger.



■ Perform the charging

When purchasing the product, the battery is in the discharged state, therefore, it shall manually be charged at the initial stage.
Turn on the emergency switch located underneath of the main frame.

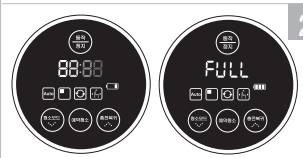




1

After accurately matching the charging pin of main frame to the charging terminal of charger, push the main frame until "piririk" sound is generated from the charger.

▶ Green light will be turned on at the charging lamp.



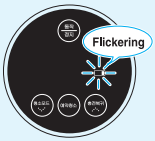
Under charging　　Completion of charging

2

Confirm the charging state of robot vacuum cleaner.

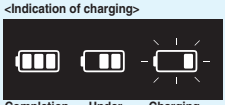
– When charging is started, "remaining amount of battery" and "8" are lighted in sequence on the state indication window.

– When charging is completed, "remaining amount of battery" and "FULL" are lighted on the state indication window.



■ When the battery remaining amount indicator is flickered during the cleaning, suction will be stopped and automatic charging will be performed by being moved to the charger.

<Indication of charging>



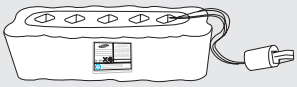
■ During the automatic cleaning, if "LO" is indicated while the battery remaining amount indicator is flickering, the cleaner will not be moved even with the remote controller and main frame button, always perform the charging by directly carrying the cleaner to the charger. (Remaining amount of battery is almost in the state of nil.)

Reference

- Roughly 120 minutes will be required to have complete charging after the purchasing and around 90 minutes can be operated.
- If charging is performed under the overheated state of battery, charging time can be delayed.
- Measures to be taken when charging in not conducted smoothly.

  When automatic charging is impossible, perform the checking of following items.
  - Turn on the emergency switch located at the bottom section of main frame after turned it off. (Reset)
  - Insert again the power supply plug of the charger. (Reset)
  - Confirm whether foreign material is adhered to the terminal section of the charger and wipe the main frame and charging terminal of the charger with dried dust cloth.
  - Confirm whether there aren't any obstacles such as the object with excellent property of reflection, chair and so forth near to the charger.
- In the case when the robotic vacuum cleaner is being separated from the charger, natural discharge will be started.
  - Make the robotic vacuum cleaner to be in the charged state at the charger as much as possible.

    (If the house becomes empty for a long period of time due to the business trip, journey and so forth, store the robotic vacuum cleaner after turned off the emergency switch and pulled off the power supply plug of the charger.)

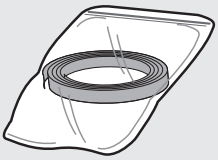


■ Get to know about battery

- **Nickel-hydrogen battery** which is not harmful to environment is used, and as it has over-charging protecting function, the battery can be used for a long period of time.
- **Warranty period of the battery is 6 months from the sales date.**
- When purchasing the battery, call to the customer care center and confirm the legitimate product mark (SAMSUNG) and model name before the purchasing.

▶ As this battery is exclusively used by the robotic vacuum cleaner of Samsung Electronics, do not use it to other electric home appliance or application.
▶ Do not conduct disassembly or modification.
▶ Perform the charging at the location with good ventilation.
▶ Do not throw the battery to fire or heat it.
▶ Do not connect metallic material to (+) or (–) terminal.
▶ Store the battery at indoors (0℃~40℃).
※ When abnormality is happened to the battery, call to near customer care center without disassembling it.
※ When charging and using time of battery become shortened as the using amount (frequency of operation) is increased, this is the case that the battery has been arrived at the end of its life, therefore, call to the customer care center for exchange.

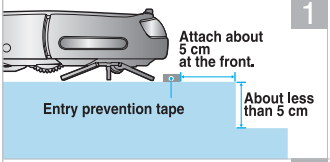
Warning
This is the product to use 220V as the rated voltage.



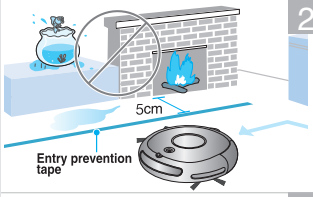
■ Installation of entry prevention tape

Always attach entry prevention tape at no–entry area of the robot vacuum cleaner.

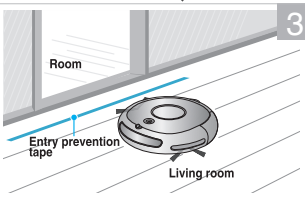
■ Remove the vinyl tape before attaching it.



1 Attach the entry prevention tape at the area which has less than 5 cm of height difference with the floor. Examples) Veranda, rest room, low stairway, entrance door of porch etc.

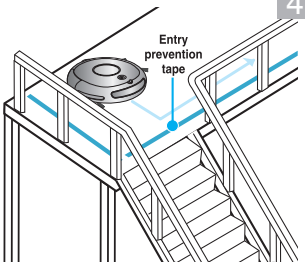


2 Attach the entry prevention tape at 5 cm in front of the places such as the fireplace, heater, heat of fire, hazardous area, and the area with moisture etc.



3 Attach the entry prevention tape in front of the room with the threshold of more than 1 cm. (attached to the living room)

▶ Only the threshold of less than 1 cm can be crossed, and if it is exceeding 1 cm, the robotic vacuum cleaner can be caught at the threshold.



4 Attach the entry prevention tape at the handrail or entrance of stairway et cetera with falling danger.

▶ If dust is accumulated on the falling prevention sensor window, falling can be happened as the robotic vacuum cleaner does not recognize the falling danger area.

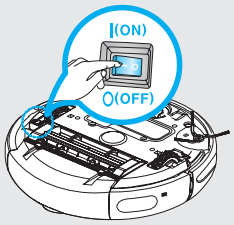
▶ If being fallen, injury or damage to the product can be happened.

Reference

- Detour can be conducted through detecting by the falling prevention sensor as falling danger area of the zone with more than 5 cm difference with the floor, however, for the area with less than that height difference, entry will be conducted as it is not to be recognized as the falling danger area.
- The entry prevention tape can be purchased from the customer care center

Caution

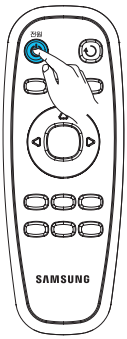
Attach the entry prevention tape as it is without cutting. Entry can be happened as the robotic vacuum cleaner may not recognize it otherwise.



■ Cleaning START/STOP

All functions of the robotic vacuum cleaner can be started or stopped.

- All functions of the robotic vacuum cleaner can be activated when the emergency switch is turned on.
- When the robotic vacuum cleaner is in operation, select the desired function after canceling the operation by pressing the 동작/정지 button.



When using remote controller

When using buttons of main frame

Power supply ON/OFF

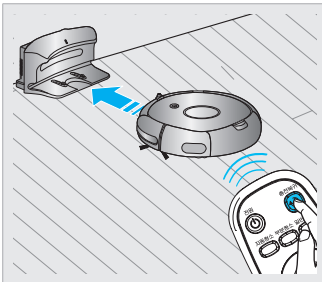
ON
- Remote controller: Press the **power supply** button.
- Main frame: Press the 동작/정지 button.
  - ▶ Buttons of main frame and battery remaining amount indication, and cleaning mode icon will be turned on.

OFF
- Remote controller: Press the **power supply** button.
- Main frame: Press the 동작/정지 button for more than 3 seconds.
  - ▶ Icons except for the battery remaining amount indication will be turned off.

Cleaning START/STOP

START
- Remote controller: Press **automatic cleaning, partial cleaning, repeated cleaning, and manual cleaning** buttons.
- Main frame: Select **automatic cleaning/partial cleaning/repeated cleaning/manual cleaning** with 청소모드 button and press 동작/정지 button.
  - ▶ Automatic cleaning will be performed when pressing 동작/정지 button without selecting the cleaning mode.
  - ▶ When starting the cleaning, the robotic vacuum cleaner will be moved.

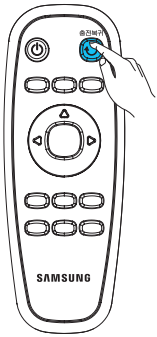
STOP — Press the 동작/정지 button of remote controller or main frame.
- ▶ When stopping the cleaning, the robotic vacuum cleaner will be stopped.



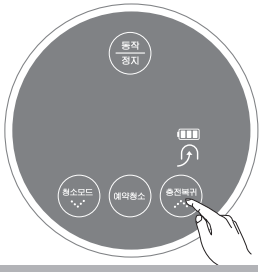
■ Returning for charging

The robotic vacuum cleaner can be returned to charger for charging by the charging return button.

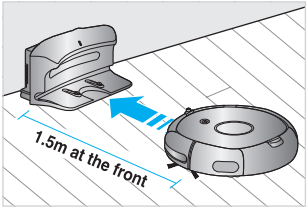
■ When the charging return button is in operation, select the charging return button after cancel the operation by pressing the (동작 정지) button.



When using remote controller



When using buttons of main frame



1 Select the charging return button

▶ Charging return will be performed as the main frame icon is turned on.

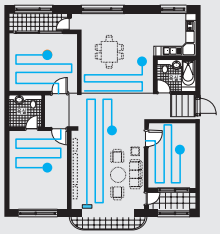
2 If being wanted to stop in the middle of the charging return, select the (동작 정지) button.

3 During the automatic charging test, press the charging return button at 1.5 m in front of the charger.

Corrective measures when the charging return is not performed.

▶ Confirm the installation state of charger.
- In the case when the charger is located at the place from which the robotic vacuum cleaner can not be induced.
- In the case when the distance between the charger and robotic vacuum cleaner is more than 5 m: Long time can be required for the charging return.

▶ Perform the manual charging for the following cases.
- In the case when installing the charger at recessed area
- In the case when the battery is completely discharged
- In the case when the robotic vacuum cleaner is being locked due to obstacles (arrangement of furniture etc.)
- In the case when the threshold of charger installation place can not be crossed (Height of threshold which can be traveled: about less than 1 cm)
- In the case when "LO" is indicated while the remaining amount indication of battery is flickering.



Using of automatic cleaning

Automatic cleaning will be conducted while moving by itself until 1 cycle of the cleaning is completed.

- When starting the cleaning from the attached state to the charger, the movement is performed while the starting point is being remembered, therefore, the charging return time will be shortened.
- When the battery is not sufficient during the cleaning, the cleaning will be started again by moving to the remaining area after the charging. (the number of re-cleaning times: 1 time)

Under cleaning

Completion of cleaning

Main frame button	Remote controller	Sequence of setting
		1 Setting of mode
		2 Canceling of setup

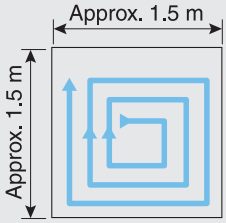
Reference

Get to know about re-cleaning function

- When being recognized that the cleaning is completed, re-cleaning will not be performed.
- If arbitrarily moving the robotic vacuum cleaner or manipulating the button while it is under automatic charging, re-cleaning will not be performed since these are being recognized as the completion of the cleaning.

Caution

Do not conduct arbitrary moving or manipulating the button of the robotic vacuum cleaner which is in the cleaning operation. Since these are being recognized as the completion of the cleaning, the cleaning operation will be started from the beginning.



Using of partial cleaning

When small fragments of cake et cetera are being fallen, these can be cleaned easily.

- Move the robotic vacuum cleaner to the place where partial cleaning is required.

Under cleaning

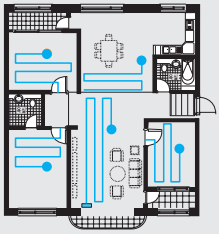
Completion of cleaning

Main frame button	Remote controller	Sequence of setting
		1 Setting of mode
		2 Canceling of setup

- ▶ The area with roughly 1.5m of width x roughly 1.5m of length is supposed to be cleaned.
- ▶ When the cleaning is completed, the cleaner will be standby for next operation at the original place after indicating the END mark.

Reference

Under the attached state to the charger, the partial cleaning will not be performed.



Under cleaning

■ Using of repeated cleaning

Even under the state of completion of cleaning, repeated cleaning will be performed until one column of battery is started to be flickering.

- When starting the cleaning from the attached state to the charger, the movement is performed while the starting point is being remembered, therefore, the charging return time will be shortened.
- When the battery is not sufficient during the cleaning, the cleaning will be started again by moving to the remaining area after the charging. (the number of re-cleaning times: 1 time)

Main frame button	Remote controller	Sequence of setting
		1 Setting of mode
		2 Canceling of setup

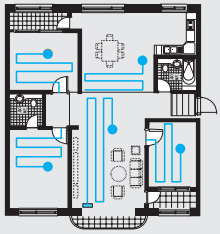
Reference

Get to know about re-cleaning function

- If arbitrarily moving the robotic vacuum cleaner or manipulating the button while it is under automatic charging, re-cleaning will not be performed since these are being recognized as the completion of the cleaning.

Caution

Do not conduct arbitrary moving or manipulating the button of the robotic vacuum cleaner which is in the cleaning operation. Since these are being recognized as the completion of the cleaning, the cleaning operation will be started from the beginning.



Using of manual cleaning

Cleaning can be performed while directly moving the robotic vacuum cleaner with the remote controller.

- Move the robotic vacuum cleaner to the place where manual cleaning is required.
- Manual cleaning can be performed with **the remote controller only.**

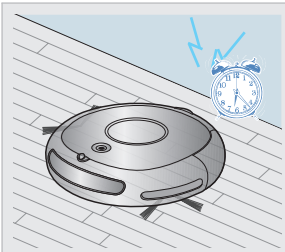
Under cleaning

Directional control (forward, left, right)
Backward function will not be supported

Main frame button	Remote controller	Sequence of setting
		1 Setting of mode
		2 Canceling of setup

Reference: Under the attached state to the charger, the manual cleaning will not be performed.

Caution: Even at the entry prevention tape attached area, falling danger area and so forth, the entry may be performed when attempting forced entry with remote controller.



■ Setting of reserved cleaning

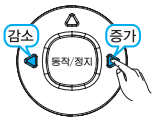
Even in absentia, automatic cleaning will be performed at desired time. (available time of reservation: 23 hours to the maximum)

- The reserved cleaning will be performed only when the cleaner is attached to the charger.

Ex) When assuming that the cleaning will be started after 5 hours from the present time

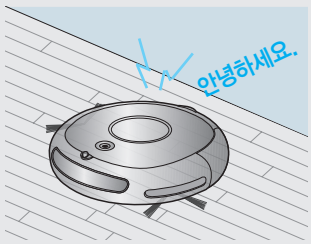
Icon is turned on.

Icon is turned off.

Main frame button	Remote controller	Sequence of setting
		1 Enter to the reserved cleaning mode
		2 Adjust the desired "time" Whenever pressing the button, one hour by one hour will be increased.
		3 Completion of setting
		Canceling of setup

Reference

At the completion of the setting, if 동작/정지 button instead of reserved cleaning button is pressed, the product will be coming out from the reserved cleaning mode.



■ Using additional functions

More simple and convenient use of the robotic vacuum cleaner will be accomplished by utilizing various additional functions.

■ **Additional functions can only be setup with the remote controller.**

VC-RA52V
VC-RL52V* SERIES

VC-RA50V* SERIES
VC-RL50V* SERIES

Selection of voice (exclusive use for VC-RA52V,VC-RL52V* SERIES)

Select desired voice guide by pressing the **voice selecting** button.

▶ Whenever pressing, it will be setup in the sequence of the sound deletion → voice guide.

Voice guide : Voice guide will be provided.
Sound effect : Melody will be provided.
Sound deletion : Sound will not be produced.

Sound deleting function (exclusive use for VC-RA52V,VC-RL52V* SERIES)

When pressing the **sound deleting** button, the sound will not be produced.

▶ Whenever pressing, it will be setup in the sequence of the sound deletion → voice guide.

Button locking function

When pressing the **button locking** button, the main frame buttons will be locked.

▶ Whenever pressing, it will be setup in the sequence of the button locking → releasing of button locking.

Description mode function (exclusive use for VC-RA52V,VC-RL52V* SERIES)

Press the description mode button.

※ When pressing the button, voice guide will be performed in sequence.

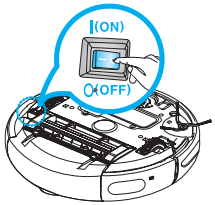
Introducing each function of the robot vacuum cleaner
Description of the cleaning mode and simple embodiment

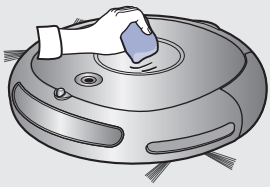
Reference
The description mode will not be conducted under the attached state to the charger, therefore, perform this function after moving it to wide area.

※ The mail reservation function will be applied to VC-RA8* model only.

■ Precautions before the handling

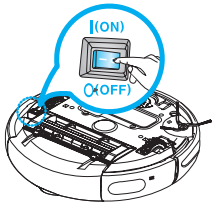
- In the case when the emergency switch is damaged, call to the customer care center so as not to have danger.
- Do not arbitrarily modify the robotic vacuum cleaner or use any means or mechanical device to accelerate the deformation of its shape.
- **Before the handling, always turn off the emergency switch at the bottom of the main frame. Wound can be resulted due to sudden action of the robotic vacuum cleaner.**



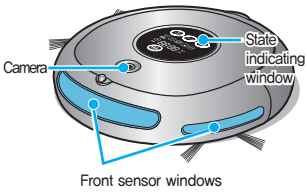


■ Handling method of sensor window and camera

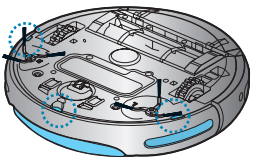
Perform the handling only after turned off the emergency switch at the bottom of the main frame.



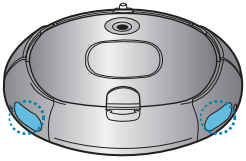
- Never spray water, thinner, and benzene et cetera to the main frame of robotic vacuum cleaner for the purpose of cleaning.
- When wiping all of the sensor windows or camera, sweep them down lightly with smooth cloth.



Front sensor windows and camera



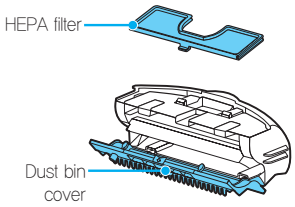
Falling prevention sensor windows



Rear sensor windows

Get to know about cleaning and handling method.

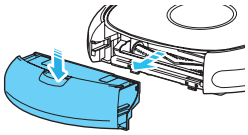
Regularly empty dust bin and take care of the HEPA filter.
Always observe the following items.



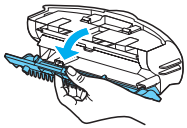
■ Handling method of dust bin and HEPA filter

When starting the cleaning, empty the dust bin in the first place.

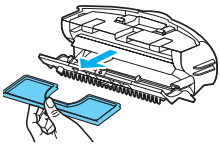
- ▶ **When separating the dust bin, be careful not to be spilt of the dust accumulated in the dust bin.**
- ▶ Empty the dust bin under the following cases.
  1. When dust is existed in the dust bin.
  2. When the sectional force becomes suddenly weakened.
  3. When the noise becomes abruptly increased.



1 Separate the dust bin by pulling it after pressing the dust bin discharging (PUSH) button.

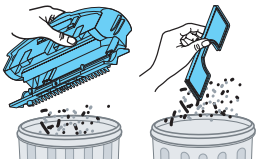


2 Separate the dust bin cover in the arrow direction.



3 Separate the HEPA filter from the dust bin.

1. Dust bin: Wipe the moisture completely.
2. HEPA filter: Assemble this after completely dried.



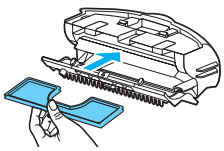
4 Shake the dust off from the HEPA filter and dust bin.

※ Water washing is possible.

Reference

When water washing has been performed..

1. Dust bin: Wipe the moisture completely.
2. HEPA filter: Assemble this after completely dried.



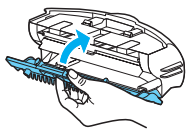
5 Re-assemble the HEPA filter into the dust bin.

- ▶ Assemble in such a way that the lattice pattern of the HEPA filter goes to the bottom side.

If the direction is reversed, it will not be assembled.

Caution

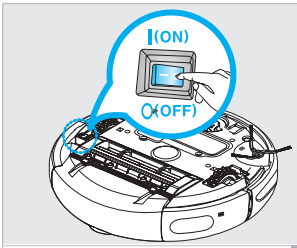
If the dust bin is assembled to the robotic vacuum cleaner under the state of not attaching the HEPA filter, the inspection code C08 is generated, therefore, always insert the HEPA filter.



6 After closing the dust bin cover, re-assemble it to the main frame.

When being blocked by foreign material, remove it as follows.

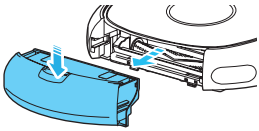
When suction force of the robotic vacuum cleaner is weakened or trembling noise is generated, the cleaner may have been blocked by foreign material.



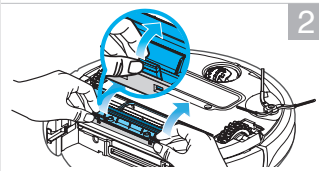
■ Handling method of power brush

Always turn off the emergency switch at the bottom of main frame before handling.

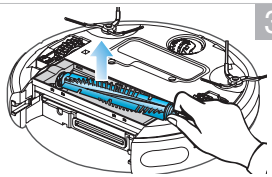
Caution: As the dust on the dust bin can be spilt, separate the dust bin before handling the power brush.



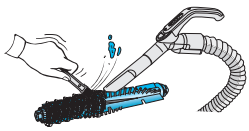
1 Separate the dust bin by pressing the dust bin discharging (PUSH) button.



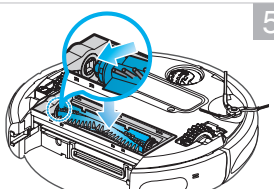
2 After confirming whether foreign material is existed or not, separate it by pressing the cover fixing hook.



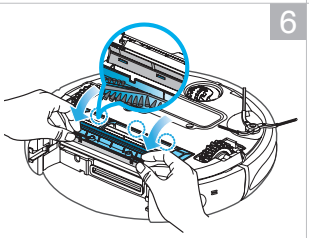
3 Lift the power brush up from the main frame.



4 Remove foreign materials such as hair or thread clung to the power brush with the cleaning brush or vacuum cleaner.



5 When the handling is over, accurately fix the power brush in the emergency switch direction, and then, secure the opposite side with the same method.

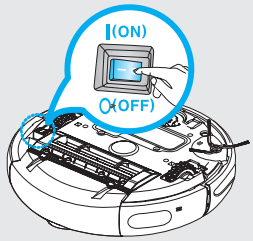


6 After insert the upper section of the cover into the groove (3 points), perform the assembling by lowering it downward until "click" sound is generated.

Caution:
- In order to prevent the blocking by foreign material, be careful not to let the cleaner inhale toothpick, cotton-swabstick and so forth during the cleaning.
- If removing of foreign material is difficult, call to the customer care center
- As the power brush performs the cleaning by sweeping up the dust of the floor, foreign materials such as thin and long thread, hair and so forth can be wound on it, therefore, perform the cleaning through regular confirmation.

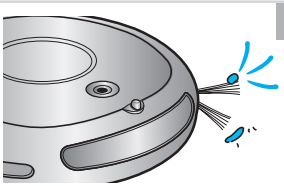
If side rotating brush becomes bent or dirty, take the following measures.

When the bottom surface to be cleaned is rough or frequent wall surface cleaning is conducted, the side rotating brush can be bent or scattered.

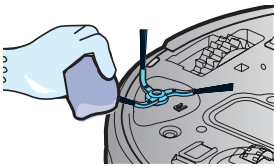


■ Handling method of side rotating brush

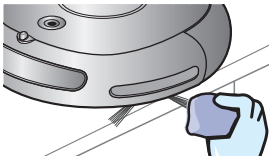
Always turn off the emergency switch at the bottom of main frame before handling.



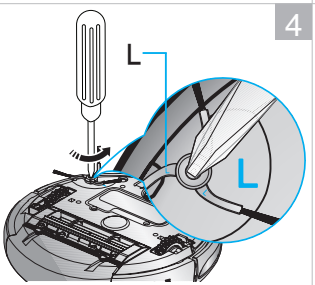
1 Confirm whether the side rotating brush becomes bent or foreign materials are adhered.



2 Wear rubber glove, and after wrapping the side rotating brush with steam towel etc. for about 10 seconds, wipe them away.



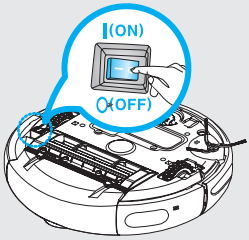
3 Perform the wiping with the same method as that of the No. 2 above while rotating the side rotating brush.



4 When large amount of hair, thread, etc. are clung to the gap between the main frame and side rotating brush, remove them by separating the side rotating brush with (+) driver. When re-assembling, conduct the assembling after confirming the "L" mark inscribed at the side rotating brush and the "L" mark of the main frame bottom.
(R mark has been inscribed for the right side of the brush.)

Reference

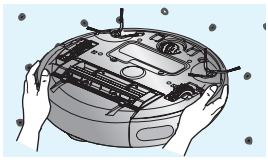
As foreign material like hair can easily be adhered to the side rotating brush, remove them frequently. If large amount of foreign materials are being caught there, there is the worry of damaging the side rotating brush.



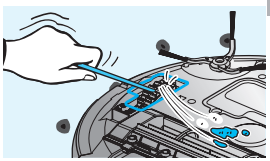
■ Handling method of driving wheel

Always turn off the emergency switch at the bottom of main frame before handling.

▶ If the robotic vacuum cleaner goes forward along a curved path suddenly, foreign material may have been caught in the driving wheel.



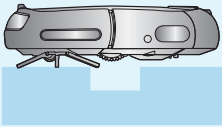
1 Spread smooth cloth on the floor and gently put down the main frame after turning it upside down.



2 After confirming whether there is any foreign material at the driving wheel, remove it with stick or tweezers etc. whose end are not sharp.

Always confirm these before reporting the failure.

If service is requested when it is not a case of failure, the service charge will be requested, therefore, read the operation manual carefully.

Symptom	Confirmation	Corrective measures
The robotic vacuum cleaner doesn't move at all before the cleaning.	▶ Has the dust bin been assembled? ▶ Has the emergency switch been turned on? ▶ Has the cleaning mode Auto of state indicating window been turned on? ▶ At the state indicating window, is the "LO" indicated at the one column while flickering at the battery remaining amount? ▶ If the dry cell of the remote controller has been discharged, the operation will not be conducted.	▶ Assemble the dust bin. ▶ Turn on the emergency switch. ▶ Press the 청소/정지 button. (When turning it off, press the 청소/정지 button for more than 3 seconds.) ▶ Move the robotic vacuum cleaner to the charger and conduct the charging. ▶ Exchange the dry cell. (AAA type)
The robotic vacuum cleaner doesn't move during the cleaning. 	▶ At the state indicating window, is the "LO" indicated at the one column while flickering at the battery remaining amount? ▶ Is the robotic vacuum cleaner being caught to the cable on the floor? ▶ Is the robotic vacuum cleaner being caught to the floor with difference of height? – Driving wheel is being lifted. ▶ Is thin towel (cloth) being wrapped in the driving wheel? ▶ Is the robotic vacuum cleaner being caught to the threshold?	▶ Move the robotic vacuum cleaner to the charger and conduct the charging. ▶ After turning off the emergency switch, remove the cable on the floor. ▶ After turning off the emergency switch, move the robotic vacuum cleaner to other place. ▶ After turning off the emergency switch, remove the thin towel. ▶ After turning off the emergency switch, move the robotic vacuum cleaner to other place.
Suction force becomes weakened during the cleaning.	▶ Confirm whether there is some dust at the dust bin inside. ▶ Confirm whether suction port has been blocked by foreign material. ▶ Confirm whether the HEPA filter has been blocked	▶ Stop the robotic vacuum cleaner and empty the dust bin. ▶ After turning off the emergency switch, remove the foreign material from the suction port. ▶ Neatly clean the HEPA filter.

If service is requested when it is not a case of failure, the service charge will be requested, therefore, read the operation manual carefully.

Symptom	Confirmation	Corrective measures
The robotic vacuum cleaner can't find the charger.	▶ Confirm whether the power supply plug of the charger has been inserted to the outlet. ▶ Take away obstacles within approx. 1 m in the front of and approx. 0.5 m to the left and right side of the charger. ▶ When foreign material is existed at the terminal of the charger, wipe it off with dry towel.	
Entry is being conducted even if the entry prevention tape has been installed.	▶ Confirm whether the entry prevention tape has been installed approx. 5 cm in front of the no entry area.	▶ Attach the entry prevention tape approx. 5 cm in front of the no entry area.
The cleaning is being done suddenly in the diagonal direction.	▶ Cleaning in the diagonal direction can be happened in the following cases. – When the cleaner has been partially charged from the charger. – When moving to another area through the shortest distance after the cleaning. – When the contact angle with obstacle is not the right angle (90°) – In the case when the floor material is tile or wooden floor.	▶ The cleaning direction will be decided in accordance with the initial position, and as the cleaning is being performed by drawing the map, there will not be any deleted place. (This is the normal movement.) Install the charger in the grain direction of the wood and start the cleaning from the attached state to the charger.

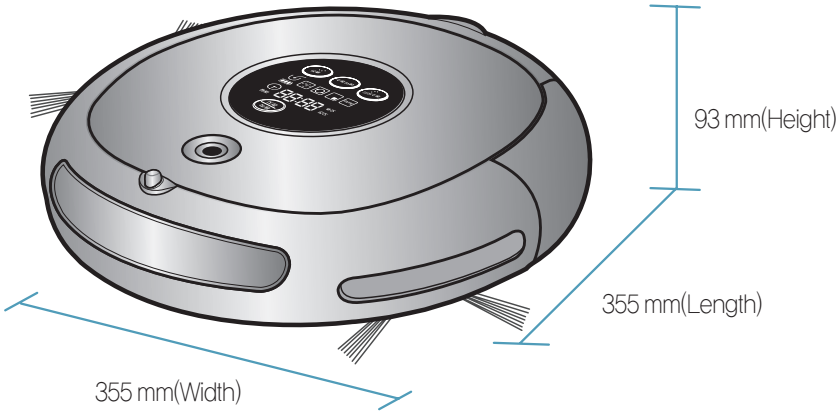
Get to know about corrective measures for each inspection code.

If service is requested when it is not a case of failure, the service charge will be requested, therefore, read the operation manual carefully.

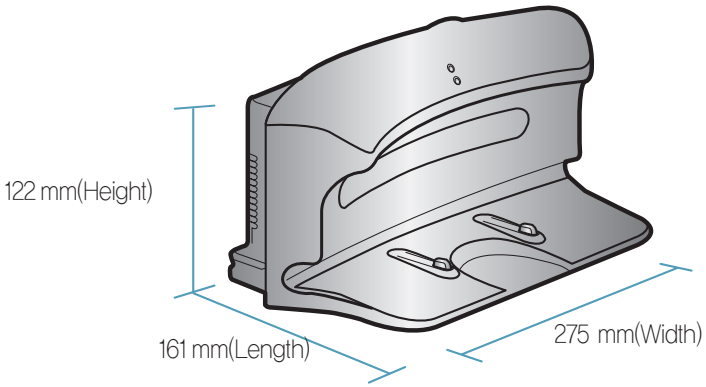
inspection code	Cause	Corrective measures
E 00	▶ Problem such as jamming, catching, locking and so forth are occurred during the traveling of the robotic vacuum cleaner.	▶ After turned off the emergency switch at the bottom side, move the robotic vacuum cleaner to other place.
E 01	▶ Foreign materials (thread, paper, toy, etc.) are caught to the power brush.	▶ After turned off the emergency switch at the bottom side, remove foreign material caught in the power brush. p31
E 02	▶ Foreign materials (thread, paper, toy, etc.) are caught to the left side driving wheel.	▶ After turned off the emergency switch at the bottom side, remove foreign material caught in the left side driving wheel. p33
E 03	▶ Foreign materials (thread, paper, toy, etc.) are caught to the right side driving wheel.	▶ After turned off the emergency switch at the bottom side, remove foreign material caught in the right side driving wheel. p33
E 05	▶ Inspection of bumper sensor is required.	▶ Gently pull the pressed bumper to the outside.
E 06	▶ Foreign materials (dust, stain, etc.) are accumulated on the obstacle sensor window.	▶ After turned off the emergency switch at the bottom side, wipe the foreign materials accumulated on the front and rear sensor windows with smooth cloth. p29
E 07	▶ Foreign materials (dust, stain, etc.) are accumulated on the falling prevention sensor window.	▶ After turned off the emergency switch at the bottom side, wipe the foreign materials accumulated on the falling prevention sensor window with smooth cloth. p29
E 08	▶ Insertion of dust bin is impossible.	▶ Insert the dust bin assembled with filter until "click" sound is generated. p30
E 09	▶ Foreign materials (thread, cloth, etc.) are caught to the side rotating brush.	▶ After turned off the emergency switch at the bottom side, remove foreign material from the side rotating brush. p32

※ When pressing **activation/stop** button or turning off the emergency switch, the inspection code will be released.

※ When inspection code is generated, voice guide will be presented (exclusive use for VC-RA52V,VC-RL52V* SERIES)



Main frame



Charger

■ Product specification

Classification	Item	VC-RA52V VC-RL52V* SERIES	VC-RA50V* SERIES VC-RL50V* SERIES
Mechanical specification	Diameter	355mm	355mm
	Height	93mm	93mm
	Weight	4.0kg	4.0kg
Electrical specification	Power supply voltage	Single phase AC220V/60Hz	Single phase AC220V/60Hz
	Power consumption for charging	50W	50W
	Power consumption for main frame	25W	25W
	Battery specification	14.4V/2,000mA	14.4V/2,000mA
Cleaning section	Dust collecting capacity	Approx. 0.6 ℓ	Approx. 0.6 ℓ
	Charging method	Automatic charging/manual charging	Automatic charging/manual charging
	Cleaning mode	Automatic, partial, repeated, manual, and reserved	Automatic, partial, repeated, manual, and reserved
	Charging time	Approx. 120 minutes	Approx. 120 minutes
	Charging time (based on wooden floor)	Approx. 90 minutes	Approx. 90 minutes
Voice guide function		O	X
Cleaning method		Recognition of ceiling image	Recognition of ceiling image
Button type of main frame		Button type	Button type

※ Charging and cleaning time may have differences in accordance with the use condition.

Dispose the waste electronic product as follows.

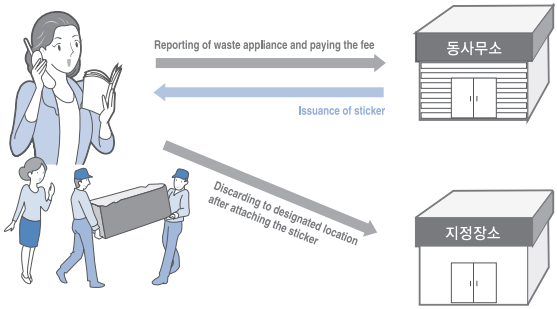
For the sake of environmental protection and recycling of resources, waste electronic product shall be disposed as follows in accordance with the meter rate system.

Disposal without charge

In the case of purchasing new product from an agency of Samsung Electronics and discarding the used one, it will be disposed without charge when delivering the new product.

Disposal with charge

In the case of discarding the used product without purchasing a new one, it can be disposed by inquiring to the corresponding village office.


Reporting of waste appliance and paying the fee
Issuance of sticker
Discarding to designated location after attaching the sticker
동사무소
지정장소

[Green management] of Samsung Electronics

Samsung Electronics prevented environmental contamination accident through the establishment of environmental management system in June, 1992, and after announcing 'environmental policy' for continuous improvement, they declared the [green management] in May, 1996. The green management of Samsung Electronics is the expression of the will to participate for the embodiment of affluent living of human and global environmental preservation by recognizing the environment, safety, and health as the core elements of enterprise management activity and through the active promotion of this.

What is the recycling mark?

This is the mark to indicate the articles which can be recycled among the waste generated after use of the product so that it can be distinguished by the user. (examples: papers, scrap irons, glass bottles, and synthetic resins)

What is the material indication mark?

PS

This is the mark to be indicated so that the waste which can be recycled can easily be distinguished by the recycling enterprise etc. through the indication of the material of synthetic resin component.

Memo

Memo

Memo

Product warranty

In the case of the cleaner, product warranty period is one year, and component possession period is 7 years.

For service

This enterprise, Samsung Electronics, enforces the warranty for the product as follows in accordance with the announcement of the Fair Trade Commission for the customer dispute solution standard for each item. When the service is requested, it will be performed by Samsung Electronics Service Inc. or designated cooperation company. Information on the state of compensation and contents will be replied within 7 days from the requested date, and damage compensation will be solved within 14 days from the informed date.

Product name		Model name	
Purchasing date	Year Month Date	Serial No.	
Purchased agency		Sales amount	

Service without charge

※In the case of use by converting to business purpose with general product, half of the warranty period will be applied.

Customer's pattern of damage			Contents of compensation	
			Within the warranty period	After the warranty period
When failures on the performance, function are occurred under normal use state within the component possession period	When an important repair is required within 10 days after the purchasing date.		Exchange of product or reimbursement of purchasing price	Not applicable
	When an important repair is required within 1 month after the purchasing date.		Exchange of product or repair without charge	
	The damage occurred during the transport process and product installation when purchasing the product		Exchange of product	
	The failure, for which important repair is required, occurred to the exchanged product within 1 month.		Reimbursement of purchasing price	
	When the exchange is impossible			
	Repair is possible	When up to the 2nd time of failures are generated with the same defect.	Repair without charge	Repair with charge
		When the 3rd failure is generated with the same defect.	Exchange of product or reimbursement of purchasing price	Repair with charge
		When the 5th failure is generated with different defect.		Repair with charge
	In the case when the servicing enterprise loses the product for which the repair has been requested by customer			Reimbursement by adding 10% to the amount for which fixed amount depreciation has been conducted.
	In the case when the repair becomes impossible as the component for repair is not being possessed within the component possession period.			
	When the repair is impossible even though the components is available.			Reimbursement after conducting the fixed amount depreciation
In the case of failure due to intention, mistake of customer	In the case when the repair is impossible.		Exchange of product after collecting the amount corresponded to the repair with charge	Exchange of product by applying depreciation after collecting the amount corresponded to the repair with charge
	In the case when the repair is possible.		Repair with charge	Repair with charge

Service with charge

※In the case of no-failure, if service is requested, corresponding charges will be requested, therefore, always read the operation manual carefully.

1. In the case when it is not the failure of product such as washing of the device, adjustment, operational instruction, or installation etc,

- Simple adjustment without operational instruction and disassembly
- Problems from external environment such as internet, antenna, and wire signal etc.
- Initial installation of the delivered product
  ※ When installed by service after the purchasing, the service charge will be requested.
- Deterioration of installation due to the movement of product, removal etc.
- Handling of filters and removing of foreign material from accessories (hose, brush, and pipe etc.)
- Description of failure due to other company's product (including software)

2. In the case of the failure due to the mistake of customer

When failure is occurred due to the negligent handling of customer or erroneous repair

- When failure is occurred through erroneous use of electric capacity
- When failure or damage is occurred due to the external impact or dropping etc.
- When failure is occurred through the use of consumables, optional items which have not been designated by this company.
- When failure is occurred through the repair by the person who is not the technician of Samsung Electronics Service Inc. which is the entrusted service company of Samsung Electronics Inc. and of the cooperation company.
- When failure is occurred because of not following the "precautionary items" in the operation manual.

3. Other cases

When failure is occurred due to the natural disasters (lightening, fire, sea water damage, flood damage, etc.)
In the case when the life of consumables is exhausted (battery, oscillator, lamps, drum, filters, etc.)

삼성전자주식회사
http://www.sec.co.kr

This warranty is only to be used in Korea, and as this will not be published again, please keep this safely with the operation manual.

SAMSUNG

Operation manual

Manufacturer: 271 Oseon dong, Gwangsan gu, Gwangju metropolitan city

Representative telephone number of the customer care center:

Anywhere in this country **1588-3366**

When accurately informed the model name of product, state of failure, and contact address, any anxieties of customer will always be kindly consulted and rapid service will be provided.

Home page of the customer care center: **www.samsungsvc.co.kr**

The cyber service center, in which reception of service and real time cyber consultation at the date and time exactly desired by customer can be realized, is operated.

Customer consultation office

02-541-3000, 080-022-3000

Internet home page

http://www.sec.co.kr

- Address: 271 Oseon dong, Gwangsan gu, Gwangju metropolitan city
- Manufacturer: Samsung Gwangju Electronics Inc.

한국서비스품질 우수기업이란?

소비자의 의견이나 불만 또는 피해를 신속하고 정확히 처리하는 기업에 대하여 지식경제부에서 우수기업으로 인정해 주는 제도입니다.

DJ68-00517B REV(0.6)